

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MOTOROLA MOBILITY LLC and GOOGLE LLC
Petitioner,

v.

MULTIFOLD INTERNATIONAL INCORPORATED PTE. LTD.,
Patent Owner.

IPR2025-00040
Patent 9,134,756 B2

Before KRISTEN L. DROESCH, HYUN J. JUNG, and BRIAN P. MURPHY,
Administrative Patent Judges.

MURPHY, *Administrative Patent Judge.*

DECISION
Granting Institution of *Inter Partes* Review
35 U.S.C. § 314

I. INTRODUCTION

A. Background and Summary

Motorola Mobility LLC and Google LLC (collectively “Petitioner”) filed a Petition pursuant to 35 U.S.C. § 311 requesting institution of *inter partes* review of claims 1–9 of U.S. Patent No. 9,134,756 B2 (Ex. 1001, “the ’756 patent”). Paper 1 (“Pet.”). Multifold International Incorporated Pte. Ltd. (“Patent Owner”) timely filed a Patent Owner Preliminary Response. Paper 7 (“Prelim. Resp.”). Pursuant to authorization from the Board, Petitioner filed a pre-institution Reply to Patent Owner’s Preliminary Response (Paper 8, cited as “Reply”) addressing Patent Owner’s argument that the Petition should be denied under 35 U.S.C. § 325(d) and *Advanced Bionics, LLC v. MED-EL Elektromedizinische Geräte GmbH*, IPR2019-01469, Paper 6 at 8 (PTAB Feb. 13, 2020) (precedential), and Patent Owner filed a Preliminary Sur-Reply (Paper 9, cited as “Sur-Reply”).

We have jurisdiction under 35 U.S.C. § 314, which provides that an *inter partes* review may not be instituted “unless . . . there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” Under § 314, the Board may not institute review on fewer than all claims challenged in the petition. *SAS Inst., Inc. v. Iancu*, 584 U.S. 357, 371–372 (2018). If the Board institutes a review, it will institute “on all of the challenged claims and on all grounds of unpatentability asserted for each claim.” 37 C.F.R. § 42.108(a). Upon consideration of the Petition, the Preliminary Response, the pre-institution Reply, Preliminary Sur-Reply, and the evidence of record, for the reasons set forth below, we determine the Petition demonstrates a reasonable likelihood that Petitioner would prevail in showing the unpatentability of at least one challenged claim in the ’756 patent. Accordingly, we institute an *inter partes* review of claims 1–9 of the ’756 patent on all grounds raised in the Petition.

B. Real Parties in Interest and Related Matters

Motorola Mobility LLC and Google LLC identify themselves as the real parties in interest. Pet. 1–2. Petitioner notes that “Motorola Mobility LLC is a direct, wholly owned subsidiary of Motorola Mobility Holdings LLC, which is indirectly a wholly-owned subsidiary of Lenovo Group Ltd. Motorola Mobility Holdings LLC and Lenovo Group Ltd. are not real parties-in-interest to this proceeding.” *Id.* at 2 n.1. Petitioner also notes that “Google LLC is a subsidiary of XXVI Holdings Inc., which is a subsidiary of Alphabet Inc.,” and “XXVI Holdings Inc. and Alphabet Inc. are not real parties-in-interest to this proceeding.” *Id.* n.2. Patent Owner, Multifold International Incorporated Pte. Ltd., identifies itself as the real party in interest. Paper 5, 1.

The parties identify the following related matters:

Multifold International Incorporated Pte. Ltd. v. Motorola Mobility LLC, No. 1:23-CV-1173-UNA (D. Del.) (filed October 17, 2023); and

Multifold International Incorporated Pte. Ltd. v. Google LLC, No. 1:23-CV-01323-UNA (D. Del.) (filed November 17, 2023). Pet. 2; Paper 5, 1.

Petitioner notes that “[t]he ’756 patent was previously asserted in *Multifold International Incorporated Pte. Ltd. v. Samsung Electronics Co., Ltd. et al*, Case No. 2:21-cv-00371 (E.D. Tex.), which was dismissed on June 2, 2022, with the court’s grant of a joint motion to dismiss.” Pet. 2–3.

C. The ’756 Patent

The ’756 patent, titled “Dual Screen Application Visual Indicator,” issued on September 15, 2015 from an application filed on September 28, 2011 that claims priority to four provisional applications, the earliest of which was filed on October 1, 2010. Ex. 1001, codes (22), (54), (60), 1:7–16.

Figure 1B of the '756 patent is below reproduced.

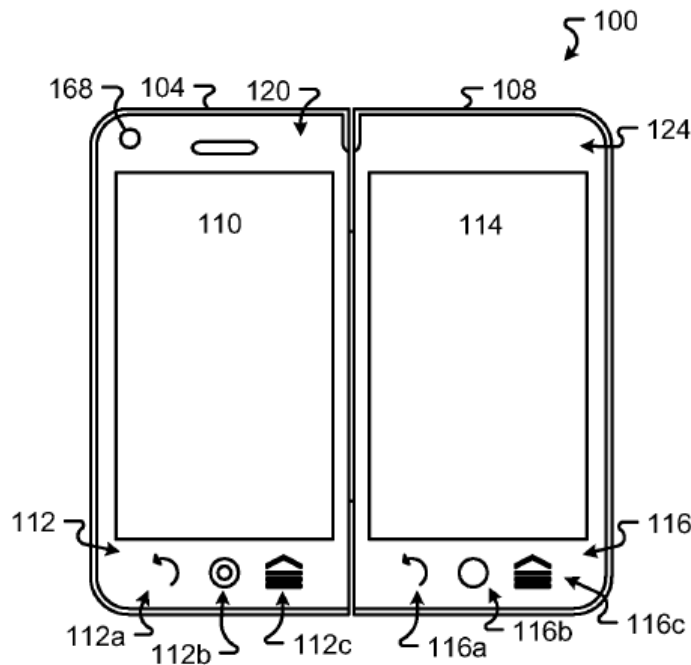


FIG. 1B

Figure 1B shows a view of a multi-screen user device, such as a cellular telephone. Ex. 1001, 6:58–59, 8:38–39. Device 100 “can be positioned in a number of different ways each of which provides different functionality to a user” and includes primary screen 104 and secondary screen 108. *Id.* at 8:48–53.¹ Screens 104, 108 can recognize a user’s gesture inputs, and a hinge connects screens 104, 108 together. *Id.* at 9:23–33, 16:6–18:56, Figs. 1C, 4A–4H. Primary screen 104 includes touch sensitive display 110 and configurable area 112, and secondary screen 108 similarly includes touch sensitive display 114 and configurable area 116. *Id.* at 8:56–67. Touch sensitive displays 110, 114 can display information. *Id.* at 8:56–60. Configurable areas 112, 116 are configured for specific inputs when touched and can include, for example, a “back” input to

¹ Quotations from patent documents may omit or de-emphasize bold numerals.

view previously displayed information, a “menu” input to view options from a menu, and a “home” input to view information associated with a “home” view. *Id.* at 8:63–9:7.

The ’756 patent further describes “[a] determined number of desktops and/or running applications can be selectively displayed on dual screen displays conditioned upon inputs received and the state of the device.” *Id.* at Abstract (code 57); *see also id.* at 4:28–32 (“The term ‘desktop’ refers to a metaphor used to portray systems” and “is generally considered a ‘surface’ that typically includes pictures, called icons, widgets, folders, etc. that can activate . . . applications, windows, cabinets, files, folders, documents, and other graphical items.”). The ’756 patent defines a “screen” or “touch screen” as “a physical structure that includes one or more hardware components that provide the device with the ability to render a user interface and/or receive user input.” *Id.* at 4:36–39. “The term ‘display’ refers to a portion of one or more screens used to display the output of a computer to a user” and “maybe a single-screen display or a multi-screen display, referred to as a composite display” that “can encompass the touch sensitive display of one or more screens.” *Id.* at 5:1–6.

For example, a first desktop or application may be displayed on primary screen display 104, and a second desktop or application may be displayed on secondary screen display 108, as shown below in Figure 10A:

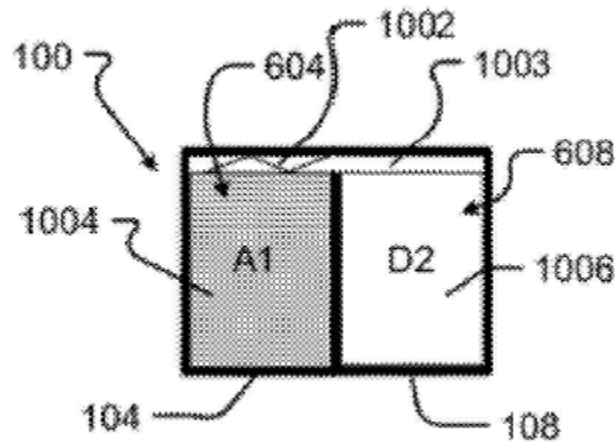
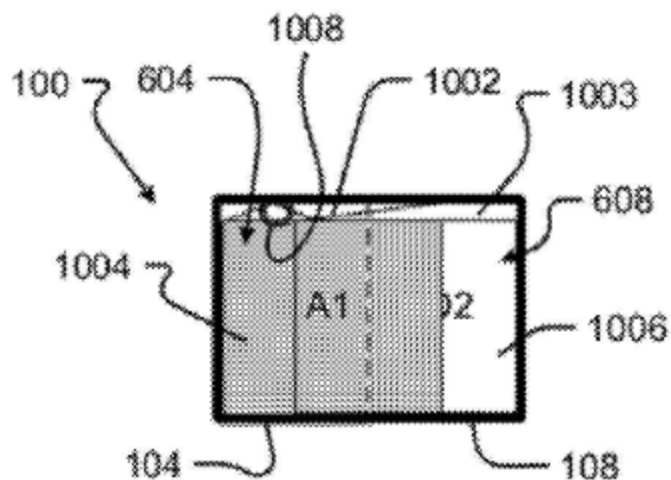
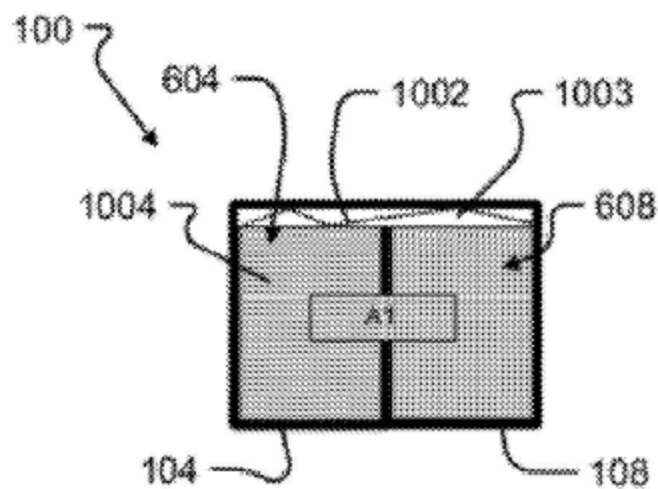


FIG. 10A

Id. at 31:16–23. In Figure 10A above, indicator 1002 in annunciator window 1003 is a “wave shape” and “signifies that a user can maximize the application A1 in its current minimized state.” *Id.* at 31:23–31. In response to a user gesture, “such as a tap or long hold gesture on the visual indicator 1002,” application A1 may be “maximized for viewing on both the first and second screens,” as depicted below in Figures 10B and 10C:



Id. at 31:43–56. In Figure 10B, above, user gesture 1008 causes application A1 to expand onto secondary screen display 108, and Figure 10C shows application A1 “now fully occupies both the primary and secondary screens.” *Id.*

D. Illustrative Claim

Petitioner challenges claims 1–9 of the ’756 patent. Claims 1 and 7 are the challenged independent claims. Claims 2–6 depend, directly or indirectly, from claim 1. Claims 8–9 depend directly from claim 7. Claim 1, reproduced below with bracketed identifiers as used in the Petition, illustrates the claimed subject matter:

1[P] A method of displaying a plurality of desktops and/or applications, each having at least one window, on a multi-display device, comprising:

1[A] receiving, by a processor, a first input that represents an instruction to reveal one of a desktop or application on a first display of the multi-display device; selecting, by the processor, a first desktop or application to display on the first display;

1[B] receiving, by the processor, a second input that represents an instruction to reveal one of a desktop or application on a second display of the multi-display device; selecting, by the processor, a second desktop or application to display on the second display; displaying, by the processor, the selected first and second desktops or applications on the first and second displays;

1[C] receiving, by the processor, a third input that represents an instruction to maximize a selected one of the first or second desktops or applications resulting in the selected one being displayed on both of the first and second displays; and displaying, by the processor, the selected one of the first or second desktops or applications in a maximized condition.

Ex. 1001, 35:23–45.

E. Prior Art and Asserted Grounds

Petitioner asserts claims 1–9 of the ’756 patent are unpatentable on the following grounds:

Claim(s) Challenged	35 U.S.C. §	Reference(s)/Basis
1–4, 6–9	102(a) ²	Yook ³
1–9	103(a)	Yook
1–3, 6, 7, and 9	102(b)	Lee ⁴
1–3, 6, 7, and 9	103(a)	Lee
1–3, 6, 7, and 9	102(e)	Aguilar ⁵
1–3, 6, 7, and 9	103(a)	Aguilar
1–3, 6, 7, and 9	102(b)	Purcell ⁶
1–9	103(a)	Purcell, Yook

Petitioner relies on the declaration of Dr. Jeffrey J. Rodriguez, Ph.D. (Ex. 1003) in support of the Petition. Patent Owner did not file a declaration in support of the Preliminary Response.

II. ANALYSIS

A. Level of Ordinary Skill in the Art

Petitioner contends that a person of ordinary skill in the art (“POSITA”) “would have had an undergraduate degree in electrical engineering, computer engineering, computer science or a related field along with two years of experience in the field of user interface technologies, including e.g., graphical user interface technologies, or a related field.” Pet. 20–21 (citing Ex. 1003 ¶ 42).

² The Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) (“AIA”), includes revisions to 35 U.S.C. §§ 102 and 103 that became effective after the filing of the application that led to the challenged patent. Hence, this *inter partes* review is governed by the pre-AIA provisions of 35 U.S.C. §§ 102 and 103.

³ US 2010/0248788 A1, filed Mar. 22, 2010, published Sept. 30, 2010 to Yook et al. (“Yook”) (Ex. 1004).

⁴ US 2007/0085759 A1, filed Oct. 12, 2006, published Apr. 19, 2007 to Lee et al. (“Lee”) (Ex. 1005).

⁵ US Patent No. 8,677,284 B2, filed Nov. 4, 2009, issued Mar. 18, 2014 to Aguilar (“Aguilar”) (Ex. 1006).

⁶ US 2007/0024645 A1, filed May 19, 2006, published Feb. 1, 2007 to Purcell et al. (“Purcell”) (Ex. 1007).

“Patent Owner applies [Petitioner’s] definition of a [person of ordinary skill in the art] for the purposes of [its] preliminary response but expressly reserves the right to urge a different definition . . . and support such definition with evidence including expert testimony.” Prelim. Resp. 9 (citing Pet. 20).

In determining the level of ordinary skill in the art, various factors may be considered, including the “type of problems encountered in the art; prior art solutions to those problems; rapidity with which innovations are made; sophistication of the technology; and educational level of active workers in the field.” *In re GPAC, Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995) (citing *Custom Accessories, Inc. v. Jeffrey-Allan Indus., Inc.*, 807 F.2d 955, 962 (Fed. Cir. 1986)). “These factors are not exhaustive but are merely a guide to determining the level of ordinary skill in the art.” *Daiichi Sankyo Co. v. Apotex, Inc.*, 501 F.3d 1254, 1256 (Fed. Cir. 2007). There is uncontested evidence in the record before us that reflects the knowledge and experience of a POSITA.

Based on the preliminary record, we adopt Petitioner’s as yet undisputed level of ordinary skill to determine whether there is a reasonable likelihood that Petitioner would prevail with respect to at least one of the claims challenged in the Petition.

B. Claim Construction

In this *inter partes* review, we apply the same claim construction standard that would be used in a civil action under 35 U.S.C. § 282(b). 37 C.F.R. § 42.100(b). In applying this standard, we generally give claim terms their ordinary and customary meaning as would be understood by a person of ordinary skill in the art at the time of the invention and in the context of the entire patent disclosure. *See id.*; *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–14 (Fed. Cir. 2005) (en banc). Claim terms “are generally given their ordinary and customary

meaning” as understood by a POSITA at the time of the invention. *Id.* When construing a disputed claim limitation, “we look principally to the intrinsic evidence of record, examining the claim language itself, the written description, and the prosecution history, if in evidence.” *DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 469 F.3d 1005, 1014 (Fed. Cir. 2006) (citing *Phillips*, 415 F.3d at 1312–17).

Petitioner contends the “specification of the ’756 patent includes definitions for many of the terms that appear in the Challenged Claims.” Pet. 21 (citing Ex. 1001, 3:44–6:39). Petitioner, therefore, applies “the definitions set forth in the ’756 patent” with the qualification that such application is “[f]or purposes of this proceeding only.” *Id.* For purposes of the Preliminary Response, “Patent Owner’s position is that all terms are entitled to their plain and ordinary meaning as understood by a POSITA.” Prelim. Resp. 9. Patent Owner, however, “reserves the right to expressly construe terms of the ’756 Patent should the Board institute review.”

On the present record, we determine that construction of claim terms is not necessary to determine whether to institute *inter partes* review. *See, e.g., Wellman, Inc. v. Eastman Chem. Co.*, 642 F.3d 1355, 1361 (Fed. Cir. 2011) (“[C]laim terms need only be construed ‘to the extent necessary to resolve the controversy.’”) (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999)). The parties are invited to address any claim construction issues bearing on this *inter partes* review following institution.

C. Asserted Anticipation of Claims 1–4, 6–9 by Yook (Ground 1)

Petitioner contends claims 1–4 and 6–9 of the ’756 patent are anticipated by Yook (Ground 1). Pet. 21–40 (citing Ex. 1003 ¶¶ 60–98). The Petition asserts that

Yook discloses all of the limitations recited in those challenged claims, including independent claims 1 and 7. *Id.*

Patent Owner contends the Petitioner has failed to meet its burden to show a reasonable likelihood that at least one of the challenged claims is unpatentable, because none of the cited references disclose or suggest the limitation of “*selecting, by the processor, a first [second] desktop or application to display on the first [second] display*” recited in Limitations 1[A] and 1[B] identified above. Prelim. Resp. 1, 13–17.⁷

Anticipation under 35 U.S.C. § 102 requires “the presence in a single prior art disclosure of all elements of a claimed invention arranged as in the claim.” *Therasense, Inc. v. Becton, Dickinson & Co.*, 593 F.3d 1325, 1332 (Fed. Cir. 2010); *Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1369 (Fed. Cir. 2008). To anticipate a patent claim under 35 U.S.C. § 102, “a reference must describe, either expressly or inherently, each and every claim limitation and enable one of skill in the art to practice an embodiment of the claimed invention without undue experimentation.” *American Calcar, Inc. v. Am. Honda Motor Co.*, 651 F.3d 1318, 1341 (Fed. Cir. 2011) (citing *In re Gleave*, 560 F.3d 1331, 1334 (Fed. Cir. 2009)). “[E]xtrinsic evidence may be considered when it is used to explain, but not expand, the meaning of a reference.” *In re Baxter Travenol Labs.*, 952 F.2d 388, 390 (Fed. Cir. 1991) (citing *Scripps Clinic & Research Foundation v. Genentech, Inc.*, 927 F.2d 1565, 1576–77 (Fed. Cir. 1991)).

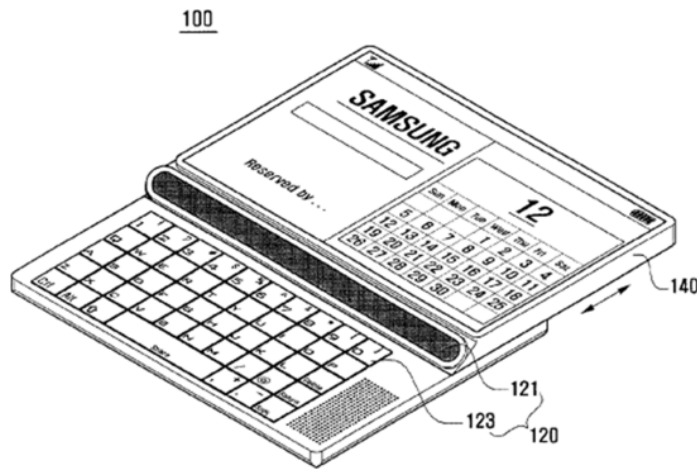
We assess Petitioner’s evidence and argument according to the above-referenced anticipation standard. For the reasons given below, we determine the

⁷ Independent claim 1 recites the quoted limitations; independent claim 7 does not.

Petition satisfies the reasonable likelihood of prevailing standard under 35 U.S.C. § 314(a). We begin with a discussion of Yook.

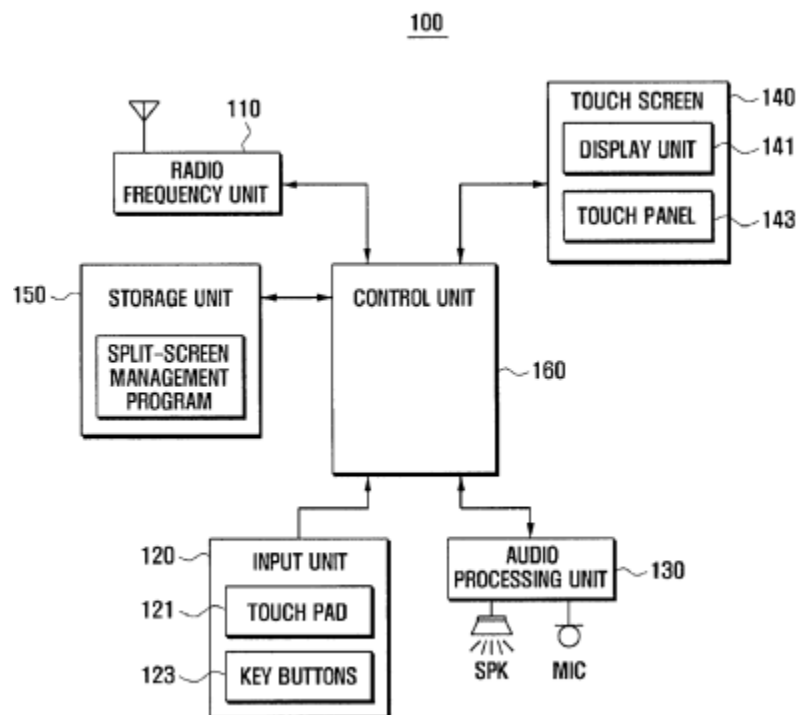
I. Overview of Yook

Yook, titled “Method of Dividing Screen Areas and Mobile Terminal Employing the Same,” relates particularly “to a method and mobile terminal that can divide the screen into individual divided screen areas and simultaneously present user functions on the individual divided screen areas.” Ex. 1004 ¶ 3. Yook Figure 1 is reproduced below.



Id., Fig. 1. Figure 1 “illustrates an external appearance of a mobile terminal.” *Id.* ¶ 11. Mobile terminal 100 includes input unit 120 and touch screen 140. *Id.* ¶ 25.

Yook Figure 2 depicts “an exemplary block diagram” of Figure 1, and is reproduced below.



Id. ¶ 12. The block diagram in Figure 2 includes radio frequency unit 110, storage unit 150, input unit 120, audio processing unit 130, and touch screen 140, all operatively connected to central control unit 160. *Id.* ¶ 25. Touch screen 140 (depicted in Figure 1) includes a display unit and touch panel that can be arranged in front of the display unit. *Id.* ¶ 30.

Mobile unit 100 can activate a screen management program stored in storage unit 150 “in response to a user request, divide the screen into divided screen areas if necessary, and output functional view areas related to activated user functions on the individual divided screen areas.” *Id.* ¶ 26. Control unit 160 executes the divided screen areas function. *Id.* ¶ 31; *see also id.* ¶ 37 (“In particular, the control unit 160 controls an operation to demarcate the display unit 141 into two areas according to properties of activated user functions, and outputs functional view areas related to the user functions to the two areas.”).

“The screen area management program can be loaded on the control unit 160 in response to activation of a particular user function.” *Id.* ¶ 35. The screen management program may include:

a routine for detecting an input signal generated during execution of a user function, a routine for determining whether an input signal corresponds to a condition preset for divided screen area formation, and a routine for dividing the screen if the input signal corresponds to a condition preset for divided screen area formation.

Id. “The screen area management program can further include any of an output routine for outputting two functional view areas related to a user function and the input signal to the corresponding divided screen areas of the display unit 141.” *Id.*

[W]hen a first user function and a second user function, which are independent of each other, are activated at one of the same time and in sequence, . . . control unit 160 can control the display unit 141 to divide the screen into two areas, and cause a functional view area A.App for the first user function to be displayed on one area and cause a functional view area B.App for the second user function to be displayed on the other area.

Id. ¶ 38, Fig. 3.

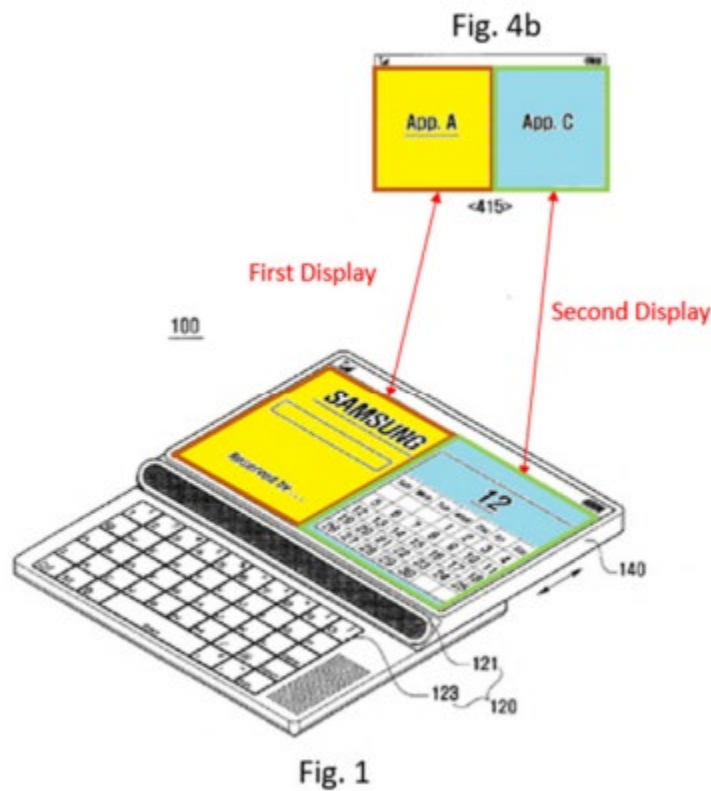
2. Analysis of Whether Yook Anticipates Claim 1

We analyze whether Yook discloses each limitation of claim 1 based on the evidence and arguments presented in the Petition. We also consider Patent Owner’s arguments and evidence presented in the Preliminary Response.⁸ For the reasons articulated below, on the present record at this stage of the proceeding, we determine Petitioner has established a reasonable likelihood of showing that at least independent claims 1 and 7 of the ’756 patent are anticipated by Yook.

⁸ Our analysis of independent claim 1 is applicable to independent claim 7, although claim 7 is directed to a “*non-transitory computer-readable medium*” rather than a method as recited in claim 1.

Preamble 1[P]: “A method of displaying a plurality of desktops and/or applications, each having at least one window, on a multi-display device, comprising:”

Petitioner contends that, if the preamble is limiting, Yook “can display multiple applications on its multi-display device.” Pet. 22 (citing Ex. 1003 ¶ 61). The Petition notes that Yook discloses a “method of supporting divided screen areas” on a mobile terminal that comprises two displays and “a processor for controlling the two displays in order to divide a screen into logical portions.” *Id.* (citing Ex. 1004, Abstract, Figs. 1, 2, 4b; Ex. 1003 ¶¶ 61, 67). The Petition annotates Yook Figures 1 and 4b, reproduced below.



Id. at 22–23. Yook Figures 1 and 4b disclose a first display (App. A, orange outline) and a second display (App. C, green outline), each of which is displayed

on a portion of a screen used to display an application image or window to a user. *Id.*; see also Ex. 1003 ¶ 63 (“Yook has at least two displays, shown in the green and orange boxes above, which are logical divisions of a single screen.”).

Patent Owner does not address this limitation. Prelim. Resp. 13–17.

On the present record, Yook and the Rodriguez Declaration adequately support Petitioner’s contention that Yook discloses Preamble 1[P].

Limitation 1[A]: “receiving, by a processor, a first input that represents an instruction to reveal one of a desktop or application on a first display of the multi-display device; selecting, by the processor, a first desktop or application to display on the first display;”

With regard to Limitation 1[A], Petitioner contends that “Yook teaches that user input can cause an application (e.g., App.A or App.C) to be revealed and displayed to the user.” Pet. 25 (citing Ex. 1003 ¶ 66; Ex. 1004, ¶¶ 46–47). The Petition illustrates the point with annotated Yook Figure 4b reproduced below:

FIG . 4b

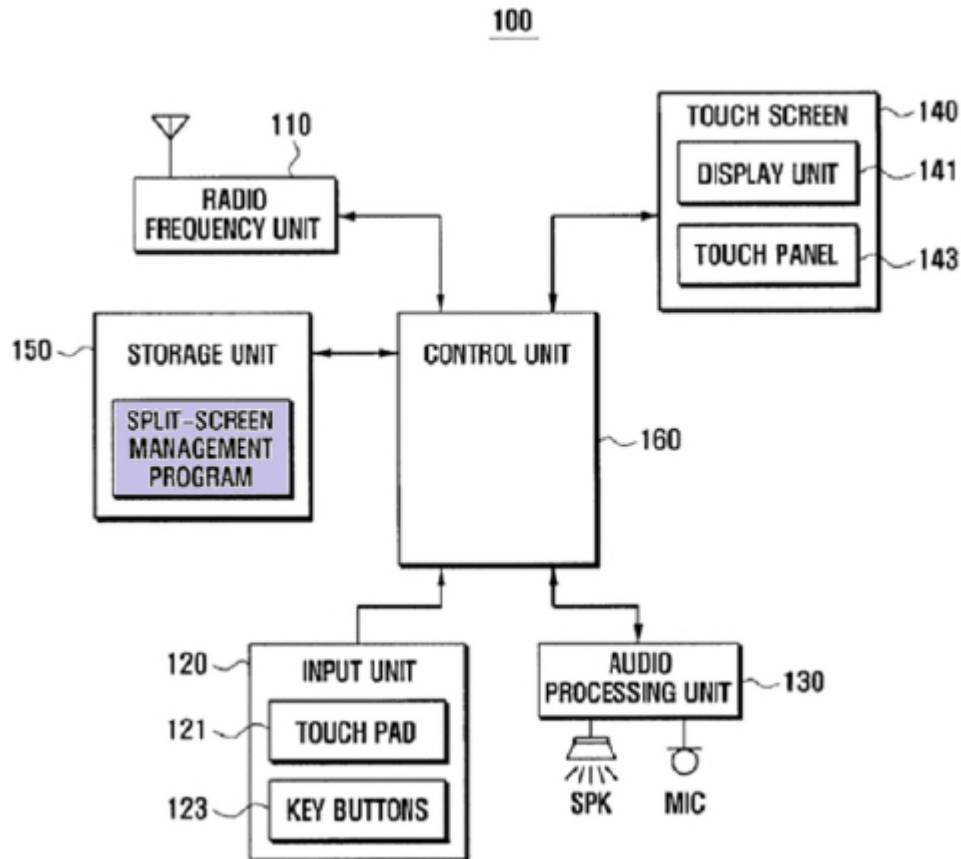


Id. As shown in annotated Figure 4b above, Yook discloses that

when the user generates an input signal to activate a menu ‘C’ or a function ‘C’, the mobile terminal 100 can display a functional view area App. C as to the menu ‘C’ or function ‘C’ on the screen, as illustrated in screen 411. Thereafter, when the user generates an input signal to activate a function ‘A’ in screen 411, the mobile terminal 100 can display a functional view area App. A as to the function ‘A’ on the display unit 141, as illustrated in screen 413.

Ex. 1004 ¶ 46.

With regard to the recited “*selecting, by the processor*” claim language, Petitioner contends that Yook “discloses a processor manages the multiple displays as separate logical displays through the use of a split-screen management program,” as illustrated in highlighted Yook Figure 2 below.



Pet. 27 (citing Ex. 1003 ¶ 69; Ex. 1004 ¶¶ 35–40, Fig. 2). The Petition argues that the “split screen or screen area management program is executed in a series of instructions or commands by the Control Unit *processor*.” *Id.* (emphasis added). Dr. Rodriguez testifies that Yook discloses Limitation 1[A] because “a user can input an instruction to reveal, e.g., App.C., and the *processor* (see *supra* ¶69) in Yook’s multi-display device will select App.C. to display on the first display, as shown in element 411.” Ex. 1003 ¶ 66 (emphasis added) (citing Ex. 1004 ¶¶ 46–47, Fig. 4b).

Patent Owner contends that the recited “*processor*,” not the user, must select a desktop or application to display after receiving input from the user. Prelim. Resp. 13–15. Patent Owner argues in particular that the “claimed processor selection or determination of the desktop or application to display is distinct from a user selection of a desktop or application to display.” *Id.* at 13. Patent Owner argues that Yook discloses “how a *user* selects an app to display on the first display,” rather than a processor selecting an app to display. *Id.* at 15. Patent Owner reasons, therefore, that the “Petition fails to demonstrate that any prior art teaches that a processor determines and causes to be displayed a first desktop or application on a first display and a second desktop or application on a second display.” *Id.* at 15.

The evidence cited in the Petition and addressed above sufficiently supports Petitioner’s argument at this stage of the proceeding that Yook discloses and teaches a control unit processor for selecting a desktop or app for display, consistent with Limitation 1[A]. *See* Pet. 24–27 (citing Ex. 1003 ¶¶ 65–69; Ex. 1004 ¶¶ 35–40, 46–47, 51, 58, Figs. 1, 4b, 4d, 5a). The Petition, supported by the testimony of Dr. Rodriguez and citations to Yook, contends that Yook’s control unit processor executes the split-screen management program to select multiple screen displays, thereby disclosing the “*selecting, by a processor*” element of Limitation 1[A]. Regarding independent claim 7, Petitioner also points to portions of Yook that expressly disclose various hardware and software for executing the disclosed methods, including a “special processor.” Pet. 37–38 (citing Ex. 1004 ¶¶ 26, 117). “As would be understood in the art, the computer, the *processor* or the programmable hardware include memory components . . . that may store or receive software or computer code that when accessed and executed by the

computer, *processor* or hardware implement the *processing* methods described herein.” Ex. 1004 ¶ 117 (emphasis added).

For the asserted processor selecting an application to display after receiving user input, the relied-upon portions of Yook and other cited evidence sufficiently show at this stage that Yook discloses, “in response to a user request,” “generat[ing] an input signal corresponding to a touch of the user and send[ing] the input signal to the control unit 160,” and, thereafter, “control unit 160 can control the display unit 141 to divide the screen into different areas, and cause functional view areas associated with any of independent user functions, instances of the same user function, related user functions, and main and subordinate user functions, to be displayed on the corresponding areas.” Ex. 1004 ¶¶ 26, 28, 42; *see also id.* ¶¶ 58–64 (describing, with reference to Figs. 5A, 5B, selecting an icon for an app and outputting a functional view related to the app).

If Patent Owner raises this issue for trial, Patent Owner should consider proposing an interpretation for “*receiving, by a processor, a first input that represents an instruction to reveal one of a first desktop or application on a first display of the multi-display device*” and “*selecting, by the processor, a first desktop or application to display on the first display*” (Limitation 1[A]) in support of its argument.

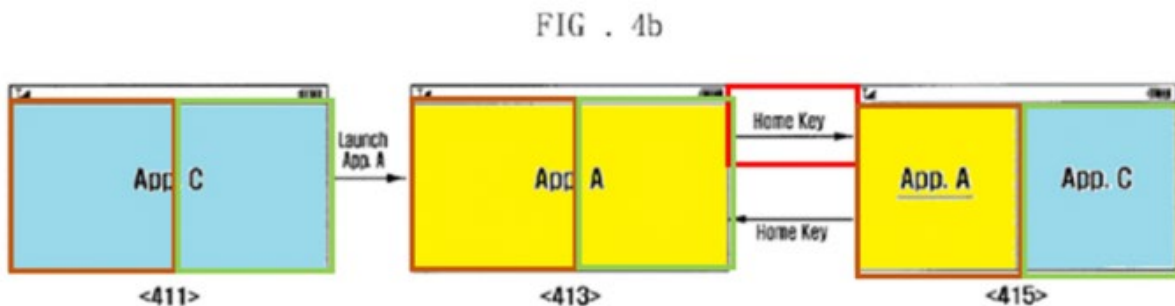
Limitation 1[B]: “*receiving, by the processor, a second input that represents an instruction to reveal one of a desktop or application on a second display of the multi-display device; selecting, by the processor, a second desktop or application to display on the second display; displaying, by the processor, the selected first and second desktops or applications on the first and second displays;*”

With regard to Limitations 1[B], Petitioner contends “Yook discloses that a user can ‘generate[s] an input signal corresponding to one of a particular key and a touch event like the ‘Home’ key in screen 413 . . . can simultaneously output two

functional view areas App.C and App.A.” Pet. 27–28 (citing Ex. 1004, ¶ 47; Ex. 1003 ¶ 71). As stated in Yook:

[W]hen the user generates an input signal corresponding to one of a particular key and a touch event like the Home key in screen 413, the mobile terminal 100 *can simultaneously output two functional view areas App.C and App.A to the display unit 141 as illustrated in screen 415*, where the functional view area App.C is related by an event history to the functional view area App.A. In this case, the mobile terminal 100 can control the display unit 141 to divide the screen into two areas, and cause functional view areas to be displayed on the corresponding areas.

Ex. 1004 ¶ 47 (emphasis added). The Petition illustrates the “Home Key” function in annotated Figure 4b of Yook reproduced below:



Pet. 28. In annotated Figure 4b, the Home Key input is shown in the red box and demonstrates how Yook reveals the second application to the user when it may have been in the background prior to the reveal. *Id.*

Patent Owner responds to Petitioner’s arguments regarding Limitation 1[B] by relying on the same argument discussed above with regard to Limitation 1[A]. Prelim. Resp. 13–15. Our analysis of Patent Owner’s argument and evidence discussed above regarding Limitation 1[A], applies equally to Limitation 1[B].

On the present record, Yook and the Rodriguez Declaration adequately support Petitioner’s contention that Yook discloses Limitation 1[B].

Limitation 1[C]: “receiving, by the processor, a third input that represents an instruction to maximize a selected one of the first or second desktops or applications resulting in the selected one being displayed on both of the first and

second displays; and displaying, by the processor, the selected one of the first or second desktops or applications in a maximized condition.”

Petitioner contends that Yook discloses Limitation 1[C]. Pet. 30 (citing Ex. 1003 ¶ 75). The Petition illustrates how Yook’s device can switch to full screen mode for a single application from split-screen mode for two applications, as shown in annotated Figure 4d reproduced below:

FIG . 4b



Id. at 31 (annotated) (citing Ex. 1003, ¶ 76; Ex. 1004, Fig. 4b, ¶ 46). In Figure 4b, above, when App.A is in split-screen mode with App.C (415), a user can provide an input using the “Home” key, and direct the processor to respond by initiating full screen mode for App.A (413). *Id.* The Petition contends that App.A then displays in a “*maximized*” condition on both the first display and the second display. *Id.* The Petition cites to other embodiments disclosed in Yook where a user can “*maximize*” an application window on both displays.

Patent Owner does not address Limitation 1[C]. Prelim. Resp. 13–17.

On the present record, Yook and the Rodriguez Declaration adequately support Petitioner’s contention that Yook discloses Limitation 1[C].

3. Conclusion for Ground 1

For the reasons given above, the Petition and Declaration of Dr. Rodriguez adequately support the assertion that Yook discloses Preamble 1[P] and

Limitations 1[A]-1[C] and anticipates independent claim 1 of the '756 patent. Therefore, at this stage of the proceeding, the arguments and evidence in the Petition demonstrate a reasonable likelihood Petitioner would prevail in showing the unpatentability of at least independent claims 1 and 7 as anticipated by York. 35 U.S.C. § 314(d).

D. Asserted Anticipation of Claims 1–3, 6, 7, by Purcell (Ground 7)

Petitioner contends claims 1–3, 6, 7, and 9 of the '756 patent are anticipated by Purcell (Ground 7). Pet. 73–83 (citing Ex. 1003 ¶¶ 176–192). The Petition asserts that Purcell discloses all of the limitations recited in those challenged claims, including independent claims 1 and 7. *Id.*

Patent Owner contends the Petitioner has failed to meet its burden to show a reasonable likelihood that at least one of the challenged claims is anticipated by Purcell, because Purcell does not disclose “*selecting, by the processor, a first [second] desktop or application to display on the first [second] display*” recited in Limitations 1[A] and 1[B]. Prelim. Resp. 1, 13–17. As stated previously, independent claim 1 recites the quoted limitations; independent claim 7 does not.

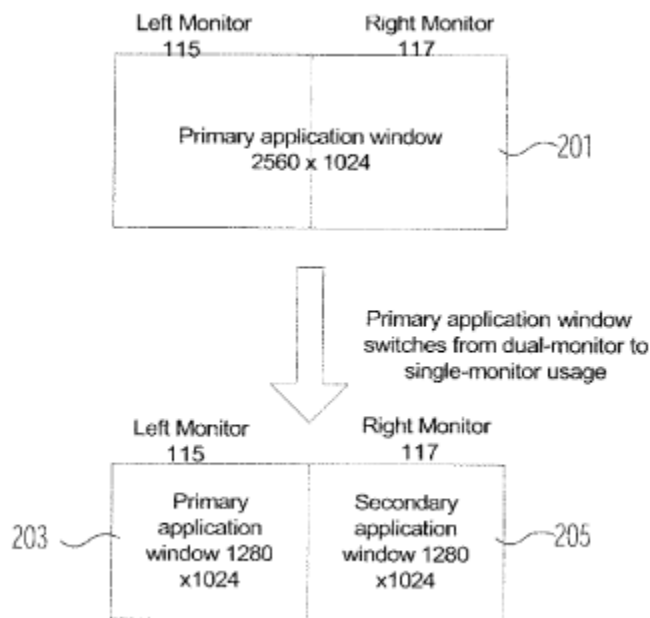
We assess Petitioner’s evidence and argument according to the above-referenced anticipation standard. For the reasons given below, we determine the Petition satisfies the reasonable likelihood of prevailing standard under 35 U.S.C. § 314(a) with respect to at least claim 1 of the '756 patent. We begin with a discussion of Purcell.

1. Overview of Purcell

Purcell, titled “Multiple Application and Multiple Monitor User Interface Image Format Selection System for Medical and Other Applications,” is directed to a system with multiple display monitors “for displaying multiple user interface image windows associated with corresponding multiple executable applications” to

a user. Ex. 1007, code (54), Abstract. The Purcell system “includes an input processor for receiving command data representing a command to initiate execution of a function of a second application and display of an associated second image window in response to user entry of a command. . . .” *Id.* at Abstract, ¶ 13. “A user interface comprises one or more display images enabling user interaction with a processor or other device.” *Id.* ¶ 15.

Figure 2 of Purcell is illustrative and reproduced below:



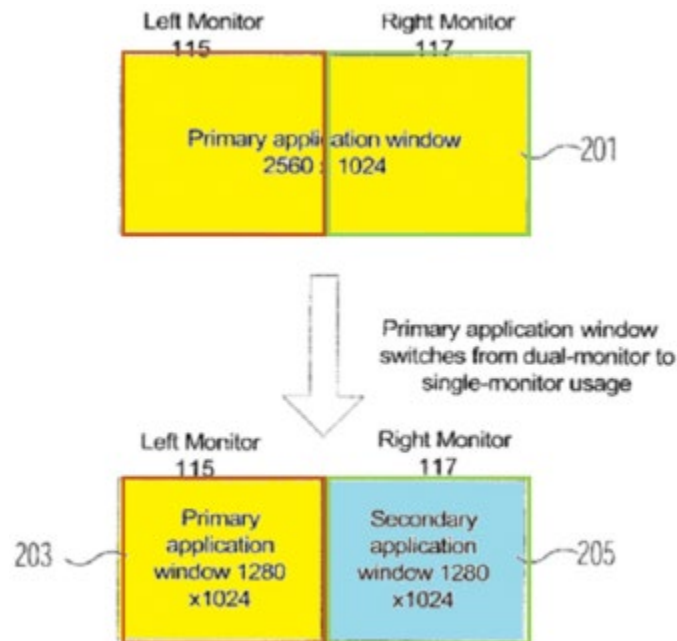
Id. Fig. 2. Purcell explains that primary application window 201 can run with a single window “spanning both monitors.” *Id.* ¶ 16. Purcell then notes “to permit another application to execute concurrently and display an image window adjacent to an image window of the primary application, system 100 dynamically changes the primary application image window size to match that of a left monitor (monitor 115).” *Id.* The system then “initiates execution of a secondary application that displays an associated image window on the right monitor (117).” *Id.*

2. Analysis of Whether Purcell Anticipates Claim 1

We analyze whether Purcell discloses each limitation of claim 1 based on the evidence and arguments presented in the Petition. We also consider Patent Owner's arguments and evidence presented in the Preliminary Response. For the reasons articulated below, on the present record at this stage of the proceeding, we determine Petitioner has established a reasonable likelihood of showing that at least independent claim 1 of the '756 patent is anticipated by Purcell.

Preamble 1[P]: *“A method of displaying a plurality of desktops and/or applications, each having at least one window, on a multi-display device, comprising:”*

Petitioner contends that, if the preamble is limiting, Purcell discloses Preamble 1[P]. Pet. 74 (citing Ex. 1003 ¶ 176). The Petition relies on an annotated form of Purcell Figure 2 to illustrate the disclosure of Preamble 1[P]:



Id. at 75 (citing Ex. 1007,⁹ Fig. 2; Ex. 1003 ¶ 178). In annotated Figure 2, Purcell discloses a device with a first display (orange box) and a second display (green box). *Id.* As stated previously, Purcell is directed to a system with multiple display monitors that is used to display multiple applications at the same time to a user. Ex. 1007, Abstract; Ex. 1003 ¶ 178.

Patent Owner does not address Preamble 1[P]. Prelim. Resp. 13–17.

On the present record, Purcell and the Rodriguez Declaration adequately support Petitioner’s contention that Purcell discloses Preamble 1[P].

Limitation 1[A]: *“receiving, by a processor, a first input that represents an instruction to reveal one of a desktop or application on a first display of the multi-display device; selecting, by the processor, a first desktop or application to display on the first display;”*

With regard to Limitation 1[A], Petitioner contends that “Purcell discloses receiving an input to a processor to cause a first application to be revealed on the first display.” Pet. 75 (citing Ex. 1003 ¶ 179). The Petition points out that Purcell discloses an “image format selection processor” and a “display processor” to execute computer readable instructions stored in the system in order to perform the method steps in Limitation 1[A]. *Id.* (citing Ex. 1007 ¶¶ 13–15, Fig. 1; Ex. 1003 ¶ 80). With reference to annotated Figure 2, above (Preamble 1[P]), Purcell discloses that a primary application can run with a single window and span both monitors (displays), or the first application (yellow) can be displayed only on the first display (orange box). The Petition argues that “either scenario meets the claim” Limitation 1[A]. *Id.* at 76–77 (citing Ex. 1003 ¶ 181; Ex. 1007 ¶ 16).

Patent Owner again contends that the recited “processor,” not the user, must select a desktop or application to display after receiving input from the user.

⁹ The Petition, page 75, cites Ex. 1006 below Purcell Fig. 2, but Dr. Rodriguez’s cited testimony and page 74 of the Petition all cite to Purcell Ex. 1007.

Prelim. Resp. 13–15. Patent Owner further argues that Petitioner’s argument regarding Purcell (Limitations 1[A] and 1[B]) “does not address the requirement that a processor selects the application to be displayed on the first display—Petitioners at most allege that an application is displayed, without a selection step.” *Id.* at 17. Patent Owner reasons, therefore, that the “Petition fails to show how Purcell suggests the required steps to be performed by the processor.” *Id.*

We disagree with Patent Owner’s argument for the same reasons articulated in section II.C.2., above, regarding whether Yook discloses Limitation 1[A].

In addition, the Petition specifically cites to Purcell’s disclosure of the “input processor,” which receives user input commands, and the “image format selection processor” and “display processor” used to execute computer readable display instructions stored in the system. Pet. 75–76. The Petition also emphasizes the block diagram in Purcell Figure 1, which expressly discloses the logic connections of the input processor, display processor, and image format selection processor to the dual monitors central to Purcell’s display system, as shown in Figure 2. *Id.* (citing Ex. 1003 ¶¶ 179–181; Ex. 1007 ¶¶ 13–16). As the Petition and Dr. Rodriguez note, the image format selection processor initiates the desired display format “in response to the received command data” by the “input processor,” which receives input from a user. Ex. 1003 ¶ 180 (citing Ex. 1007 ¶¶ 4, 13–15).

The Purcell system also “includes an input processor for receiving command data representing a command to initiate execution of a function of a second application and display of an associated second image window in response to user entry of a command via a first image window associated with a first application.” Ex. 1007 ¶ 13, Abstract, Figs. 1, 2. “A user interface comprises one or more display images enabling user interaction with a processor or other device.” *Id.*

¶ 15. Thus, the Petition adequately supports the argument that Purcell discloses the “*first input that represents an instruction*” element of Limitation 1[A].

The Petition adequately supports Purcell’s disclosure of Limitations 1[B] and 1[C] for similar reasons. Pet. 77–79 (citing Ex. 1003 ¶¶ 182–185; Ex. 1007 ¶¶ 16, 20, Fig. 2, claim 12). Patent Owner relies on the same argument addressed above. Prelim. Resp. 13–17.

On the present record, Purcell and the Rodriguez Declaration adequately support Petitioner’s contention that Purcell discloses Limitations 1[A], 1[B], and 1[C].

3. Conclusion for Ground 7

For the reasons given above, the Petition and Declaration of Dr. Rodriguez adequately support the assertion that Purcell discloses Preamble 1[P] and Limitations 1[A]-1[C] and anticipates independent claim 1 of the ’756 patent. Therefore, at this stage of the proceeding, the arguments and evidence in the Petition demonstrate a reasonable likelihood Petitioner would prevail in showing the unpatentability of at least independent claim 1 as anticipated by Purcell. 35 U.S.C. § 314(a).

III. DISCRETIONARY DENIAL UNDER 35 U.S.C. § 325(D)

Patent Owner argues we should exercise our discretion to deny institution under 35 U.S.C. § 325(d) because the Petition raises the same prior art previously considered by the Office—Yook, Aguilar, and Lee—and the new Purcell reference is “a secondary reference whose teachings are substantially the same as (and cumulative with) Yook.” Prelim. Resp. 11. Petitioner argues that discretionary denial under § 325(d) is inappropriate because there is no evidence that the Examiner “substantively considered” the prior art references and related arguments presented in the Petition, particularly given that “the Petition describes how each

reference anticipates the Challenged Claims.” Reply 1. For the reasons stated below, we determine the record does not warrant exercising our discretion to deny institution of *inter partes* review under Section 325(d).

The Director may deny institution of *inter partes* review when “the same or substantially the same prior art or arguments previously were presented to the Office.” 35 U.S.C. § 325(d). We apply a two-part test when evaluating whether to exercise discretion under § 325(d). *See Advanced Bionics, LLC v. MED-EL Elektromedizinische Geräte GmbH*, IPR2019-01469, Paper 6 at 8 (PTAB Feb. 13, 2020) (precedential) (“*Advanced Bionics*”).

Specifically, we consider:

(1) whether the same or substantially the same art previously was presented to the Office or whether the same or substantially the same arguments previously were presented to the Office; and (2) if either condition of first part of the framework is satisfied, whether the petitioner has demonstrated that the Office erred in a manner material to the patentability of challenged claims.

Id. In doing so, we consider the factors discussed in *Becton, Dickinson & Co. v. B. Braun Melsungen AG*, IPR2017-01586, Paper 8 (PTAB Dec. 15, 2017) (precedential as to § III.C.5, first para.; informative) (“*Becton, Dickinson*”). *Id.* at 9–11.

A. Advanced Bionics Part One

Petitioner first asserts the Petition “relies upon prior art references that were not of record during prosecution of the ’756 patent.” Pet. 9. The Petition does not specify which references were not of record during prosecution, but the record evidence in this proceeding indicates the Examiner considered Yook and the Aguilar U.S. patent publication identified in two separate IDS submissions, a fact Petitioner acknowledges in the Reply. Reply 1 (“Yook and Aguilar were cited in

an IDS filed during Prosecution.”¹⁰); Prelim. Resp. 10–11 (citing Ex. 1002, 150, 215). A European (EP) counterpart application to Lee was identified in an International Search Report made of record during prosecution. Ex. 1002, 236; Ex. 2001 (Espacenet identification of EP 1775925 to Lee). We give little weight to Petitioner’s argument that we should discount the disclosure of the EP counterpart because it does not “claim priority to Lee.” Reply 2. As Patent Owner attests, “Lee and its European counterpart share the same word-for-word disclosure.” *See* Sur-Reply 2.

There is no dispute, however, that Purcell was not made of record or considered by the Examiner. *See* Prelim. Resp. 11 (“[t]o the extent that the fourth reference – Purcell – does not appear in the prosecution record”); Reply 1 (“Purcell . . . [was] not cited during prosecution in any way”); Sur-Reply 2 (“Purcell was not of record during prosecution”). We have reviewed the prosecution history of the ’756 patent application (Ex. 1002) independently and cannot locate any disclosure of, or reference to, Purcell. Therefore, given that Petitioner has demonstrated a reasonable likelihood of prevailing on the contention that at least claim 1 of the ’756 patent is anticipated by Purcell, and that Purcell was not presented to the Office previously, we “authorize the review to proceed on all of the challenged claims and on all grounds of unpatentability asserted for each claim.” 37 C.F.R. § 42.108(a); *see also SAS Inst.*, 584 U.S. at 365 (“a reasonable

¹⁰ Petitioner’s unsupported reply argument, that “Yook and Aguilar were *never cited to* nor discussed by the Examiner” (Reply, 1 (emphasis added)) is belied by Petitioner’s own admission, the fact that Yook and the U.S. patent publication for Aguilar were cited to the Examiner by applicants, and the Examiner’s dated signature on both IDS submissions. Ex. 1002, 150 (Yook), 215 (Aguilar U.S. Patent Pub.).

prospect of success on a single claim justifies review of all”). We note the facts of this case, where Petitioner relies on a prior art reference that was not submitted to or considered by the Office, are distinguishable from those in *Ecto World, LLC v. RAI Strategic Holdings, Inc.*, where the “[p]etition relie[d] exclusively on prior art references that were submitted to the Office in an information disclosure statement (‘IDS’) during prosecution.” IPR2024-01280, Paper 13, 2 (Stewart May 19, 2025) (Director Review) (precedential as to § A) (“*Ecto World*”).

B. Advanced Bionics Part Two

Even if *Advanced Bionics* part one is satisfied by the disclosures of Yook, Aguilar, and the Lee EP counterpart, when a petitioner makes a sufficient showing that “the Office erred in evaluating the art or arguments” the Board will not deny institution under Section 325(d). *Advanced Bionics*, Paper 6 at 8. “An example of a material error may include misapprehending or overlooking specific teachings of the relevant prior art where those teachings impact patentability of the challenged claims.” *Id.* at 8 n.9. Similarly, *Becton, Dickinson* factors (c), (e), and (f) relate to whether the petitioner has demonstrated a material error by the Office. *Id.* at 10. “For example, if the record of the Office’s previous consideration of the art is not well developed or silent, then a petitioner may show the Office erred by overlooking something persuasive under factors (e) and (f).” *Id.*

The Examiner did not cite or reference Yook, Aguilar, or Lee in any office action, interview summary, or notice, and Purcell was not considered by the Examiner. Ex. 1002, 36–40, 79–85, 113–115, 125–143, 187–202; *see also Dr. Reddy’s Laboratories S.A. v. Eye Therapies, LLC.*, IPR2024-00467, Paper 14, 19 (PTAB Aug. 13, 2024) (“we do not equate an examiner’s initial on an IDS with meaningful evaluation and appreciation of the prior art”). As argued by Petitioner, “the Board routinely addresses the merits of a petition in such circumstances.”

Reply 3 (citing *Amazon.com, Inc. et al v. Nokia Techs Oy*, IPR2024-01140, Paper 9, at 16 (PTAB Feb. 12, 2025) (noting “the Examiner did not use the [references] in any rejection” and concluding “[u]nder *Becton, Dickinson* factor (c), this does not weigh in favor of denying the Petition under § 325(d)”).

On this record, we determine Petitioner has met its burden to show material error. First, “by referencing and addressing the references in a discussion of *Advanced Bionics* part two, Petitioner implicates material error by the Office.” *Smaxtec Inc. v. ST Reproductive Techns., LLC*, IPR2024-01067, Paper 7 (PTAB Jan. 21, 2025); Reply 2–5. Second, by arguing that Yook, Lee, and Aguilar were not “addressed in any way by the examiner” or “considered substantively” by the Office, Petitioner asserts that the material error was overlooking the specific teachings of the relevant prior art addressed in detail in the Petition. Reply 2–3; *see Ecto World* at 5–6 (petitioner may show “the Examiner materially erred by overlooking certain teachings in the prior art on the IDS”); *see also Advanced Bionics*, Paper 6, 10. As we discuss at length above in Section II.C., Petitioner has demonstrated a reasonable likelihood that at least claim 1 of the ’756 patent is unpatentable as anticipated by Yook (Ground 1). Our determinations are supported by detailed testimony of Dr. Rodriguez that is consistent with the express disclosures in Yook. Therefore, we find the Examiner overlooked at least the material disclosure and teachings of Yook as set forth in the Petition, which was material error by the Office.

Contrary to Patent Owner’s argument that Purcell is merely cumulative of Yook and not a material reference (Prelim. Resp. 11; Sur-Reply 2, 5), we have explained that the Petition demonstrates a reasonable likelihood of showing that Purcell independently anticipates at least claim 1 of the ’756 patent, and Purcell “disclose[s] the ability to maximize an application across both displays.” Reply 5

(citing Pet. at 30–31, 50–51, 64–65, 78). Purcell is not cumulative of Yook because Purcell executes the display of a selected application across two monitors (“*maximized*” function) in a different way than Yook. *See* Pet. 78–79 (citing Ex. 1003 ¶¶ 184–185; Ex. 1007 ¶ 20).

Contrary to Patent Owner’s argument that the Petition does not even allege Purcell to disclose Limitation 1[C], the Petition contends that Purcell discloses the display of a selected application on “*both of the first and second displays . . . in a maximized condition,*” as recited in Limitation 1[C]. *Compare* Sur-Reply 5, with Pet. 78–79 (citing Ex. 1003 ¶¶ 184–185; Ex. 1007 ¶ 20). We further note the ’756 patent applicant distinguished prior art applied by the Examiner—the Jones and Clark references—from application claim 1 to overcome office action rejections. Ex. 1002, 178 (Amendment and Response distinguishing Jones), 106–107 (Amendment and Response distinguishing Clark). In view of the Petition’s showing of a reasonable likelihood that Purcell anticipates claim 1, the fact that Purcell was not made of record or considered by the Examiner during prosecution of the ’756 patent application further weighs against discretionary denial. *See* Reply 5 (citing *Sarepta Therapeutics, Inc. v. Nippon Shinyaku Co., Ltd.*, IPR2021-01134, Paper 20, 22 (PTAB Jan. 20, 2022) (“the Office appears to have materially erred during prosecution insofar as there is no indication that the Examiner fully considered [the reference’s] teachings regarding [a specific limitation]”)).

We also reject Patent Owner’s unsupported interpretation of the MPEP that an Examiner’s “obligation to consider the information” identified in an IDS “means the examiner concluded that the reference could not support a rejection in an Office action.” Sur-Reply 3–4 (citing MPEP 609 Information Disclosure Statement). Patent Owner does not cite any case law to support such an assertion, which is inconsistent with the MPEP. MPEP 609 states that “[c]onsideration by

the examiner of the information submitted in an IDS means nothing more than considering the documents in the same manner as other documents in Office search files are considered by the examiner while conducting a search of the prior art in a proper field of search.” Thus, the inference Patent Owner attempts to draw from an examiner’s “consideration” of references identified in an IDS is not supported by MPEP 609. The inference to be drawn here is that the Examiner considered Yook and Aguilar in the same manner as the Examiner considered other references while conducting a prior art search.

Because none of the references relied on in the Petition were applied by the Examiner to reject the claims, we conclude the Office erred by overlooking the disclosures of at least Yook.

Accordingly, we decline to exercise our discretion to deny institution under 35 U.S.C. § 325(d).

IV. CONCLUSION

For the foregoing reasons, we determine Petitioner has established a reasonable likelihood of prevailing in its challenge to the patentability of at least one claim in the ’756 patent. Therefore, we institute *inter partes* review of all challenged claims on all grounds. 37 C.F.R. § 42.108(a); *see SAS* 584 U.S. at 365 (“a reasonable prospect of success on a single claim justifies review of all”).

At this stage of the proceeding, the Board has not made a final determination as to the patentability of any challenged claims or any underlying factual or legal issues. A final determination will be made based on the record as developed during the *inter partes* review. Any final determination will be based on the record developed during trial. Any argument not asserted in a timely-filed brief, such as a response to the Petition, may be deemed forfeited or waived, even if that argument appears in the Preliminary Response.

V. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that, pursuant to 35 U.S.C. § 314(a), an *inter partes* review of claims 1–9 of the '756 patent is instituted with respect to all grounds set forth in the Petition; and

FURTHER ORDERED that, pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4(b), *inter partes* review of the '756 patent shall commence on the entry date of this Order, and notice is hereby given of the institution of a trial.

IPR2025-00040

Patent 9,134,756 B2

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